

Amendments to the Specification

Please amend paragraph 0001 of the specification as follows:

[0001] The present application is related to six co-pending patent applications: U.S. Pat. App. No. 10/789,727 entitled "SYSTEMS AND METHODS FOR ACCESSING AND DISTRIBUTING MEDICAL INFORMATION" and filed by Jones et al. (Attorney Docket No. 300564); U.S. Pat. App. No. 10/789,778 entitled "SYSTEMS AND METHODS FOR PROVIDING VARIABLE MEDICAL INFORMATION" and filed by Shehadeh et al. (Attorney Docket No. 300565); U.S. Pat. App. No. 10/789,964 entitled "SYSTEMS AND METHODS FOR AUTOMATICALLY COLLECTING, FORMATTING AND STORING MEDICAL DEVICE DATA IN A DATABASE" and filed by Esler et al. (Attorney Docket No. 300567); U.S. Pat. App. No. 10/789,680 entitled "SYSTEMS AND METHODS FOR UPLOADING AND DISTRIBUTING MEDICAL DATA SETS" and filed by Fears et al. (Attorney Docket No. 300568); U.S. Pat. App. No. 10/789,798 entitled "SYSTEMS AND METHODS FOR VALIDATING PATIENT AND MEDICAL DEVICE INFORMATION" and filed by Pratt et al. (Attorney Docket No. 300569); and U.S. Pat. App. No. 10/789,788 entitled "SYSTEMS AND METHODS FOR AUTHORIZING AND PROCESSING REIMBURSEMENTS FOR SERVICES PROVIDED IN THE COLLECTION OF IMPLANTABLE MEDICAL DEVICE DATA" and filed by Stawski et al. (Attorney Docket No. 301131). Each of the above-identified applications is filed on a date even herewith, and each of the above-identified applications is hereby incorporated by reference for all purposes.

Please amend paragraph 0048 of the specification as follows:

[0048] As an example, programmers 212 typically located in physicians' offices are adapted to receive information from medical devices implanted in patients 214. However, instead of dumping the data onto a diskette as disclosed above, programmers 212 are connected to communication network ~~212~~202, and are configured to upload the medical device information to one or more of systems 206, 208 and 210. In one embodiment, programmers

212 are connected directly to communication network 202. In another embodiment, programmers 212 might be connected to communication network 202 through the physicians' information systems 216 or through other intermediary systems. As one skilled in the art will appreciate, however, the particular means by which programmers 212 are connected to communication network 202 are not important, so long as programmers 212 can communicate the medical device information to network 202 and systems 206, 208, and 210.

Please amend paragraph 0053 as follows:

[0053] In one embodiment of the present invention, physicians can use data input devices ~~220-222~~ to enter patient information, including objective and subjective information. Further, data input devices ~~222220~~ can be used to verify medical information and/or provide analysis input corresponding to medical information. Data input devices ~~222220~~ can be any suitable data input device, such as, a personal computer, a mobile computing device, or a cellular or wireless device. In one exemplary embodiment, data input devices ~~222220~~ are personal digital assistants (PDA) with integrated wireless communication capability. In addition, the data can be entered using any number of different software programs. For example, data input device ~~222220~~ can include a data entry questionnaire program, which prompts the physician to enter specific information. Alternatively, data input device ~~222220~~ may include a web browser for processing a data entry web page or applet. As one skilled in the art will appreciate, any suitable device and/or method can be used to enter the patient information, and thus, the present invention is not limited to any particular embodiment or configuration.

Please amend paragraph 0054 as follows:

[0054] In the illustrated embodiment, data input device ~~220-222~~ is connected to communication network 202 through physician's information system 216. Alternatively, data input device ~~220-222~~ can be connected directly to communication network 202 or can

be connected through some other intermediary system. As one skilled in the art will appreciate, however, the particular means by which data input device 222 is connected to communication network 202 is not important, so long as the device can communicate the medical, diagnostic and/or other patient information to network 202 and systems 206, 208, and/or 210.

Please amend paragraph 0058 as follows:

[0058] As one skilled in the art will appreciate, data from implantable medical devices typically is in an encoded binary format. In one embodiment, programmers 212, and ~~medical device-monitors~~ 218, 220 can be configured to decode the medical device data streams prior to uploading them to system server 228 and raw medical device data database (“raw database”) 230. In accordance with this embodiment, the uploaded data stream is decoded, but still is in binary format. In an alternative embodiment, programmers 212 and ~~medical device-monitors~~ 218, 220 merely receive and upload the medical device data without performing any decoding function. In this embodiment, central data processing and repository system 208 will perform the decoding function. In either case, however, raw database 230 stores the medical device information in a binary format, which makes it difficult for many programs and databases to use.

Please amend paragraph 0079 as follows:

[0079] Once the data for upload is selected (block 320), the upload command is entered (e.g., a virtual button is clicked) (block 330). Where a single patient data file was selected for upload, the upload process is performed in a single pass. Alternatively, where multiple patient data files are selected for upload, a recursive process traversing a directory structure is completed until all of the patient information is uploaded. Various data is gathered for upload (block 340) and uploaded depending upon the type and model number of a particular implantable medical device, and the information provided by the patient and/or physician as

previously discussed. Alternatively, information from the implantable medical device can be uploaded in one session, and other subjective and/or objective information gathered and uploaded in one or more other sessions.

Please amend paragraph 0106 as follows:

[0106] Once the participant is enrolled, various information can be gathered via the participant or a participant system (block 608). This information can be, for example, information received from an implantable medical device read using a device programmer or other device monitor, as discussed above. In addition, the participant can enter various information, such as subjective data, objective data, other patient information, or the like. The received information can be processed separately depending upon the type of the information. For example, the participant-entered information can be validated to make sure the information was entered correctly (block 610). One validation process (block 610) is more fully described below with reference to Fig. 6b. ~~If where if the information is not entered correctly (block 611), the system will notify the participant to fix errors (block 612).~~ ~~This validation process is more fully described below with reference to Fig. 6b.~~

Please amend paragraph 0112 as follows:

[0112] If data entry errors occur, the physician or data entry person is prompted to correct the error and resubmit the information (block 618a). Otherwise, if the data appears to be entered correctly, it is transmitted to a centralized processing system, such as the data collection system 206 or the central data processing and repository system 208 in Fig. 2. At the centralized processing system, the participant-entered data enters a second validation process, which includes testing the entered data against previously entered or recorded data (block 613). In accordance with this aspect of the invention, the entered data is compared to data in comprehensive database 238 or subset database 248 as a back-up validation.

Please amend paragraph 0113 as follows:

[0113] Again, any number of different validation checks can be performed. For example, entered height, weight or other patient demographic information might be checked against previously entered data to see if it is reasonable. If the patient's height or weight changed significantly from previous visits, the physician might be prompted to verify the entered information. Also, if the newly entered diagnosis information is inconsistent with a previous diagnosis, the system might inform the physician. If the system detects validation errors, it notifies the physician or data entry person of the error (block 614). Then the physician can either fix the error or confirm that the entered data is correct (block 618**b**).

Please amend paragraph 0114 as follows:

[0114] In order to obtain the most accurate information possible, it sometimes is beneficial to perform multiple or back-up measurements. Thus, in one embodiment, the system can be configured to prompt the physician to perform additional or back-up measurements for at least some of the fields (block 615). If the system requests back-up measurements, but the physician has not entered them, the system will prompt the physician to enter the additional measurement data (block ~~619~~**616**). The physician can elect to enter the additional measurements (block 619), or the physician can elect not to enter the additional measurement. If the additional measurements are not entered, the system can flag the measurement data as being less reliable, or the system can add a weighting factor to the measurement data that indicates that the measurement data may have errors or is less reliable than data with back-up measurement.

Please amend paragraph 0107 as follows:

[0107] With reference to FIG. 6a, ~~In~~ in addition, the received medical device information is stored to raw database 230 as described above (block 620). Because the data received from the implantable medical devices is encoded, the encoded data is passed to data translation

system 232, where it is translated as described above in relation to Fig. 4 (block 622). The resulting translated information then is validated (block 630) to ensure that the translation occurred properly and to ensure that the implantable medical devices are configured properly. This validation process is discussed in more detail below with reference to Fig. 6c.